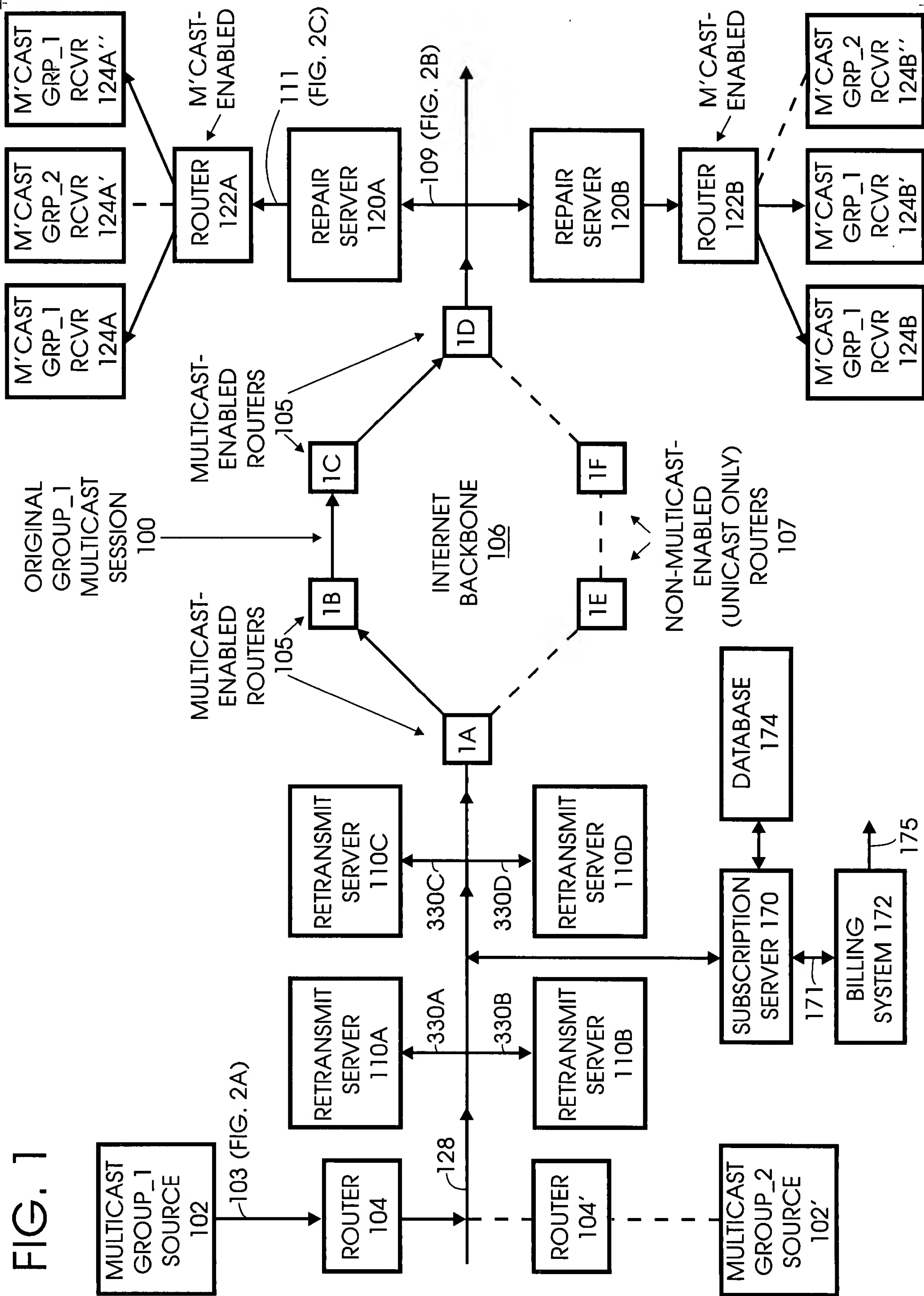


6567929

FIG. 1



6567929 "FIG. 1"

FIG. 1A

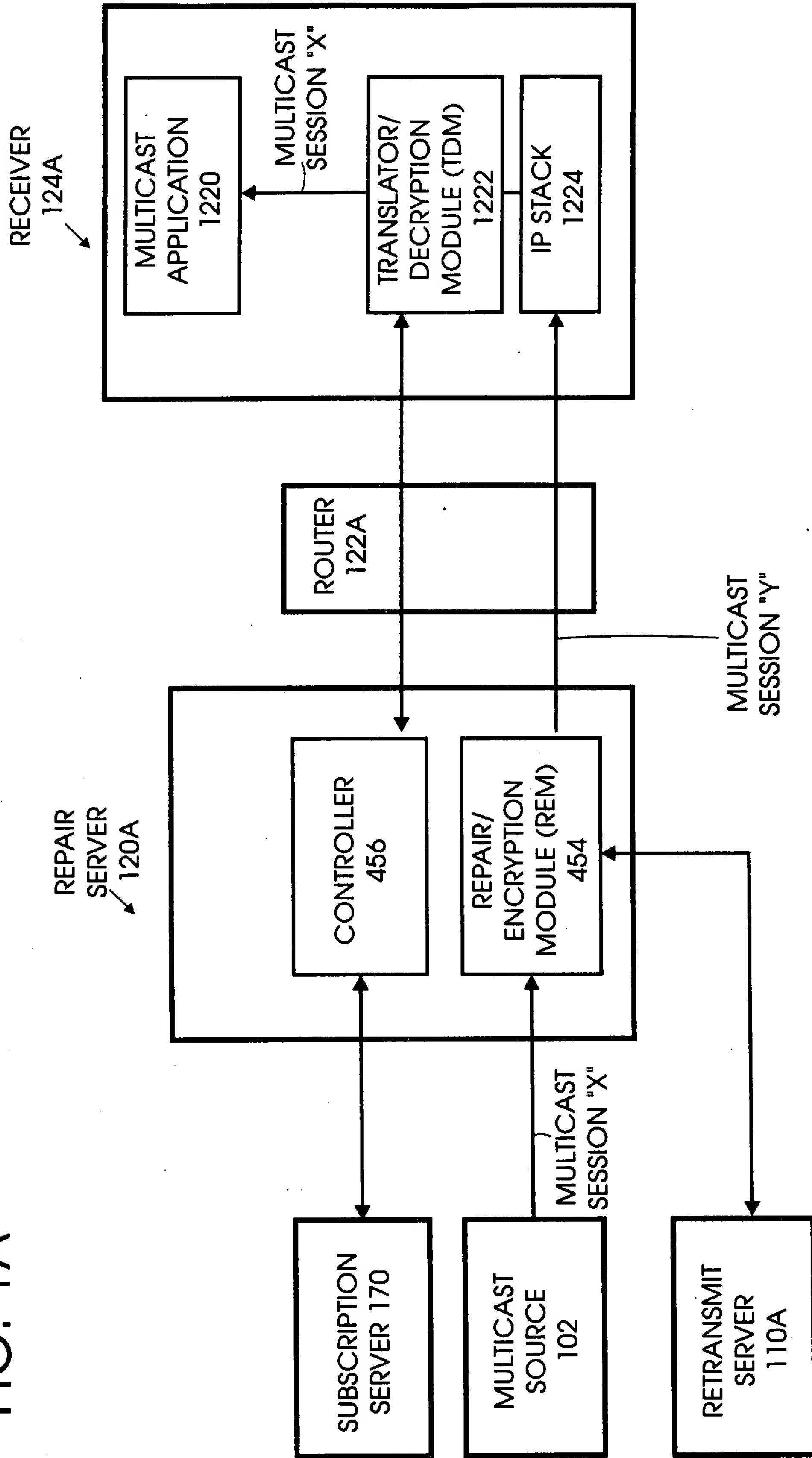


FIG. 1B

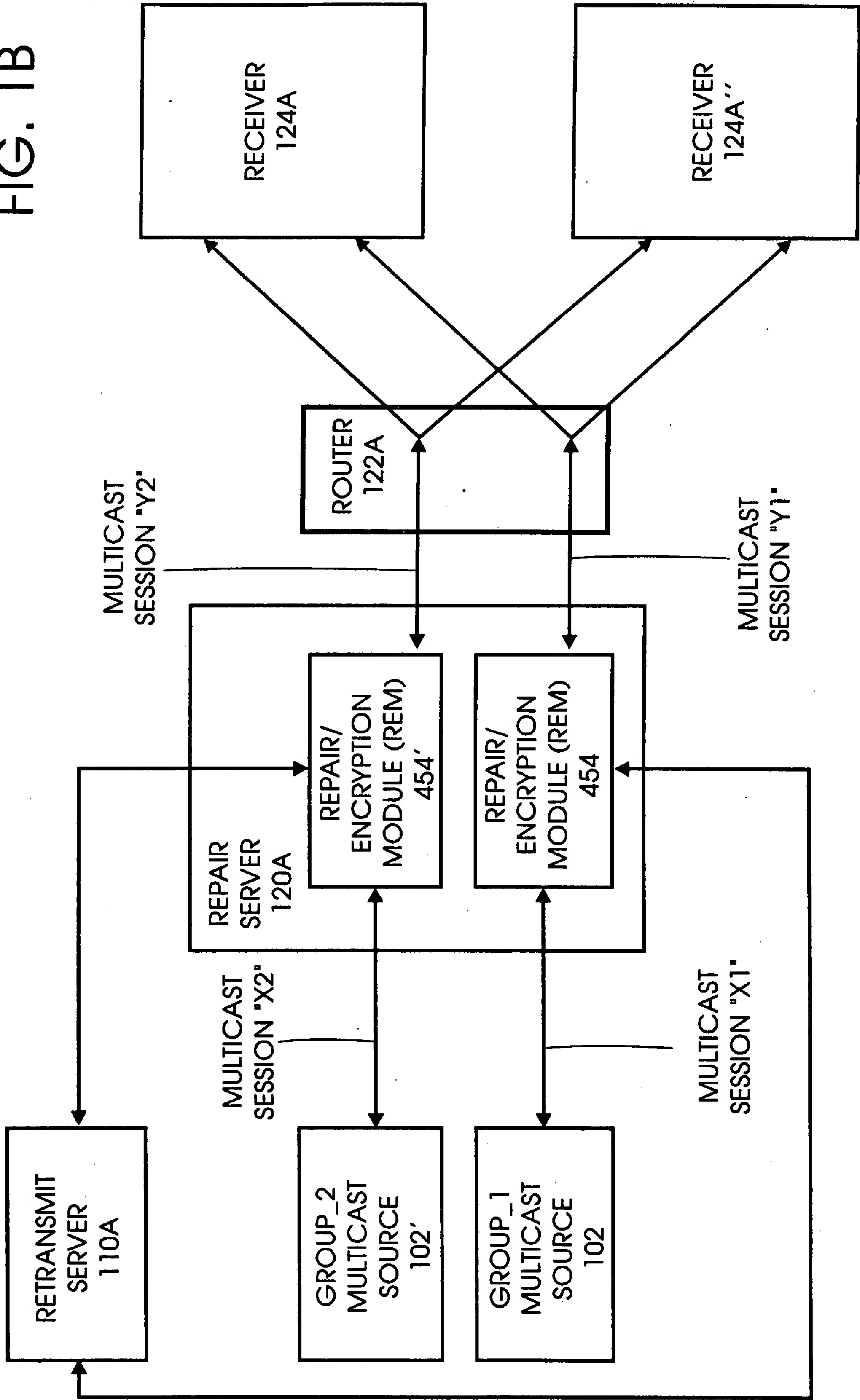


FIG. 1C

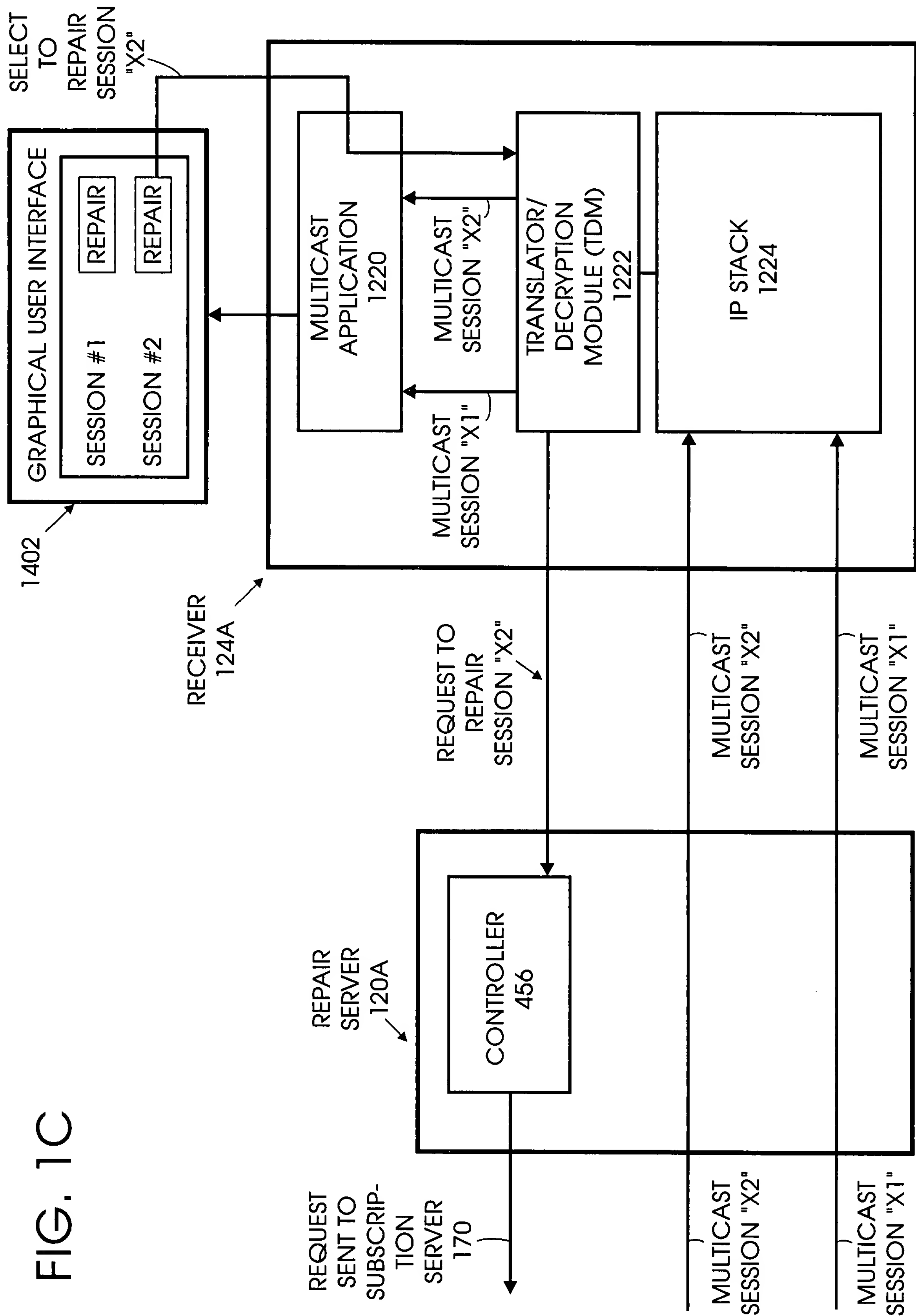


FIG. 1D

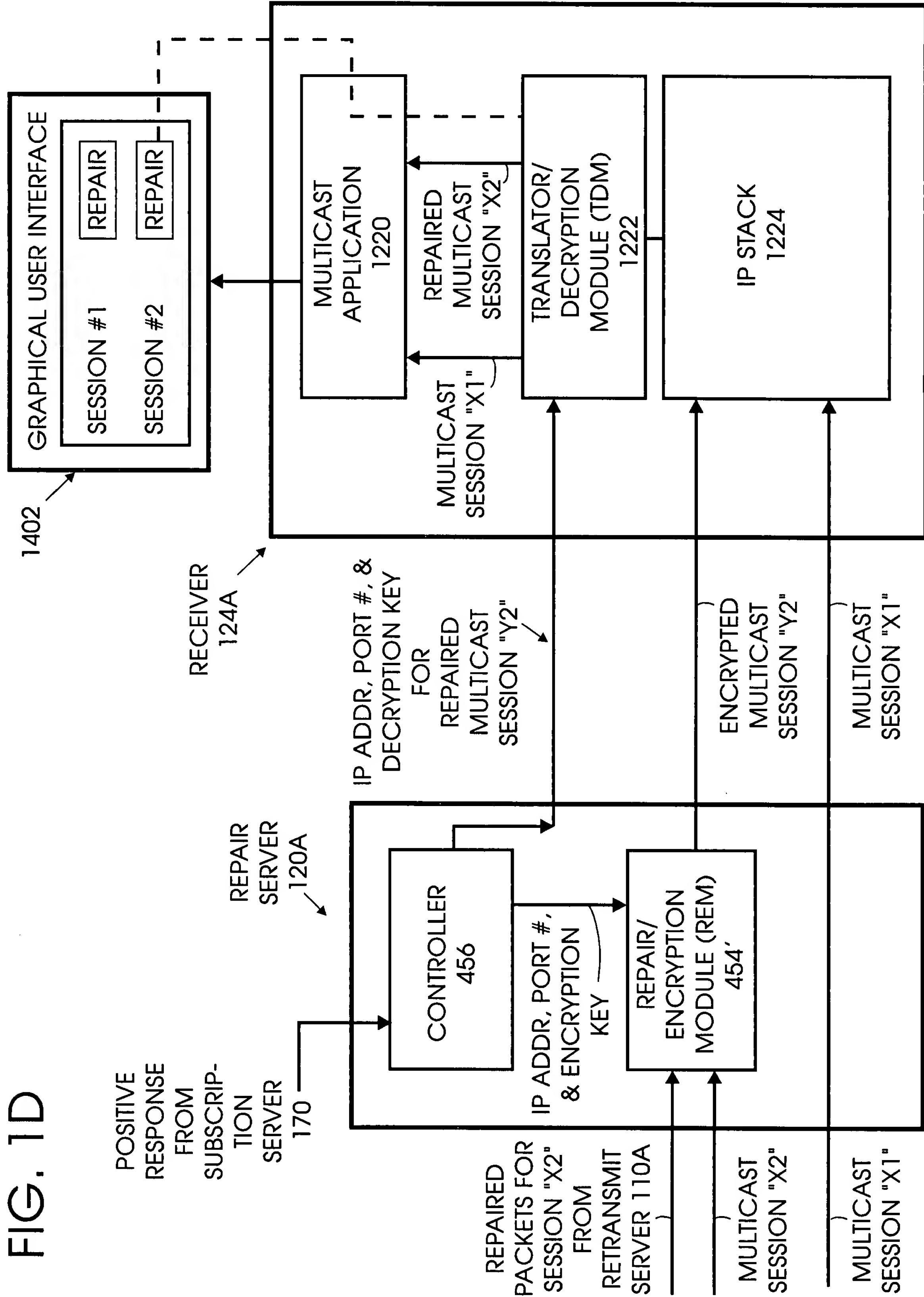


FIG. 1E

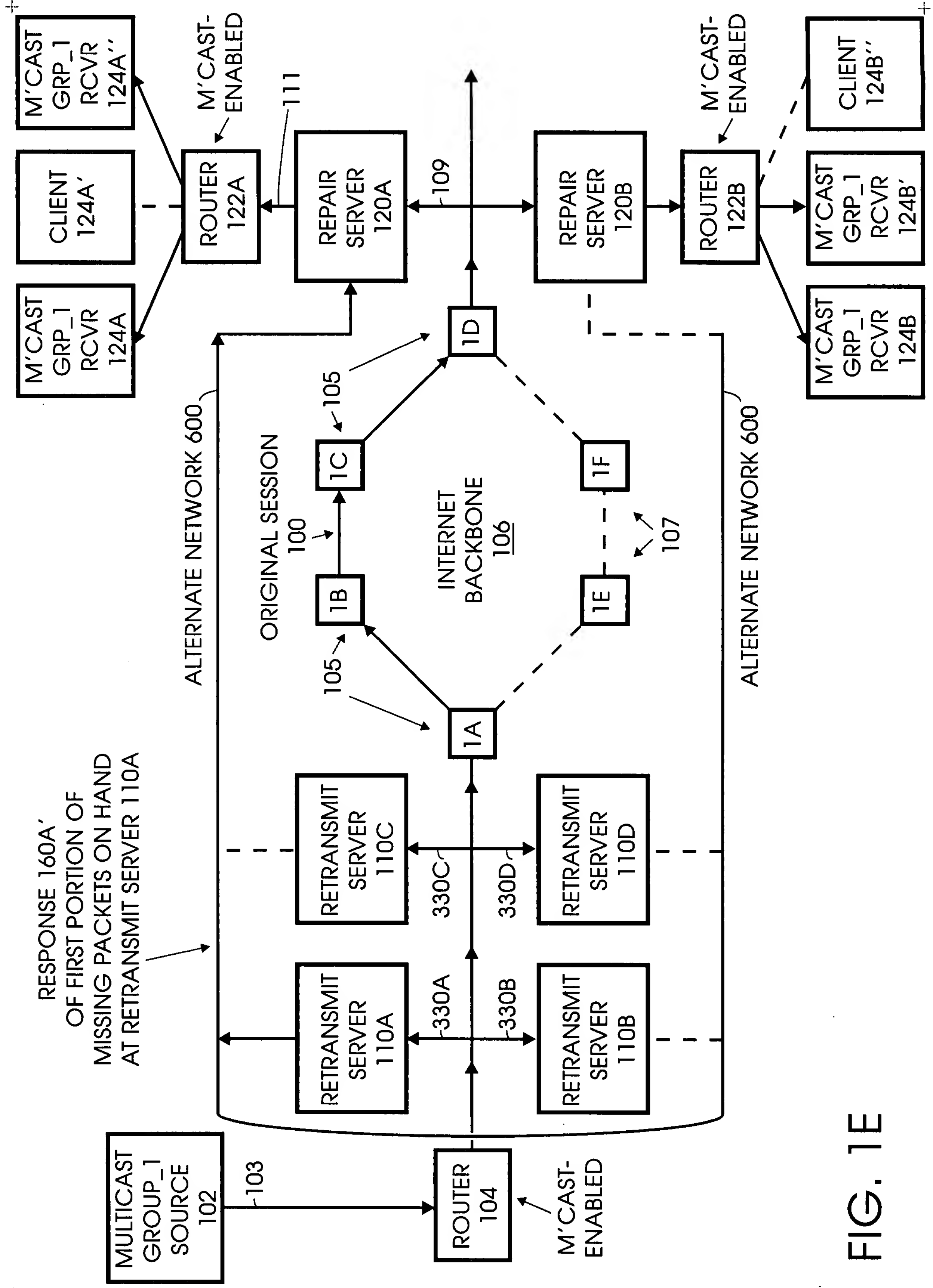
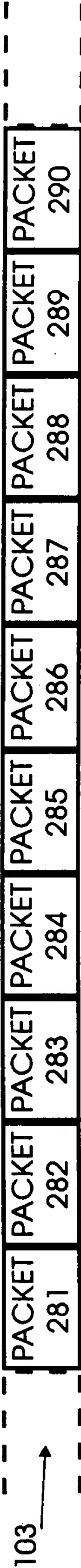


FIG. 1E

FIG. 2A

PACKETS CURRENTLY BEING OUTPUT BY
MULTICAST GROUP_1 SOURCE 102

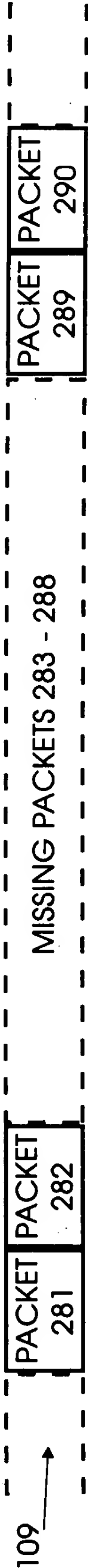


IP HEADER			UDP HEADER		RTP MESSAGE		
00	SOURCE IP ADDRESS	DESTINATION IP ADDRESS	SOURCE PORT	DEST. PORT	SEQUENCE NUMBER	TIME STAMP	DATA
	RETRANS. SERVER 110A	MULTICAST GROUP_1 ADDRESS					
			CIRC. BUFFER 130A	DELAY BUFFER 140A	285	090235	

PACKET 285

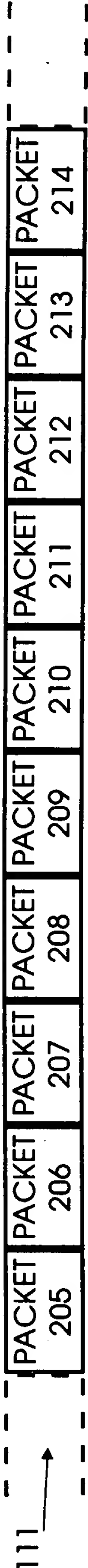
APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

FIG. 2B



PACKETS CURRENTLY BEING DELIVERED TO DELAY BUFFER 140A

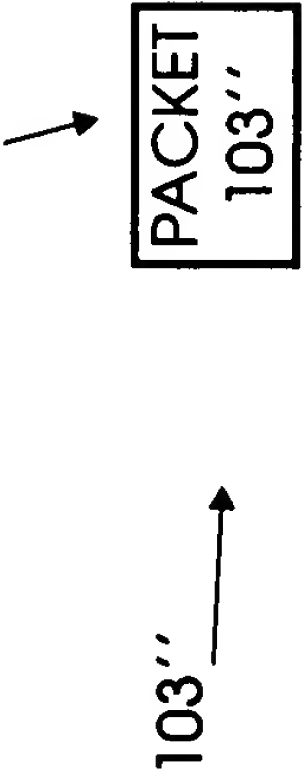
FIG. 2C



PACKETS CURRENTLY BEING DELIVERED TO ROUTER 122A
WITH A 3-SECOND DELAY

FIG. 2E

RTCP SENDER REPORT PACKET PERIODICALLY OUTPUT BY
MULTICAST GROUP_1 SOURCE 102

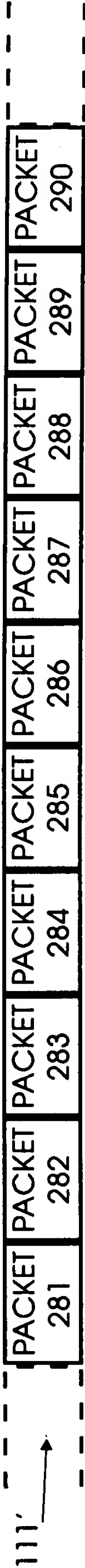


IP HEADER				UDP HEADER				RTCP SENDER REPORT			
00	SOURCE IP ADDRESS	DESTINATION IP ADDRESS	IP OPTIONS	SOURCE PORT	DEST. PORT	MSG. PROC. 132A	MSG. PROC. 142	SENDER'S ID	SENDER'S PACKET COUNT	SENDER'S OCTET COUNT	290,000
	RETRANS. SERVER 110A	MULTICAST GROUP_1 ADDRESS						GROUP_1 SOURCE 102	290		

PACKET 103'' →

FIG. 2F

REPAIRED MULTICAST SESSION 111'
WHICH APPEARS TO RECIPIENT RECEIVERS 124A
TO BE THE SAME MULTICAST GROUP_1 SESSION
FROM SOURCE 102

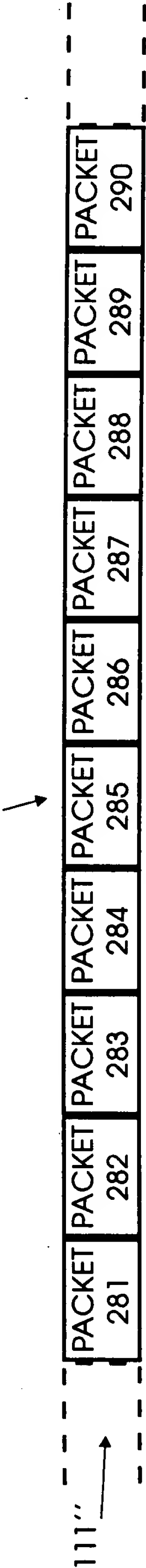


IP HEADER			UDP HEADER		RTP MESSAGE		
00	SOURCE IP ADDRESS	DESTINATION IP ADDRESS	SOURCE PORT	DEST. PORT	SEQUENCE NUMBER	TIME STAMP	DATA
	REPAIR SERVER 120A	MULTICAST GROUP_1 ADDRESS	DELAY BUFFER 140A	RCVR 124			
		IP OPTIONS			285	090235	

PACKET 285 →

FIG. 2G

REPAIRED MULTICAST SESSION 111''
WHICH HAS A DIFFERENT MULTICAST ADDRESS THAN
THAT OF THE ORIGINAL GROUP_1 SESSION FROM SOURCE 102



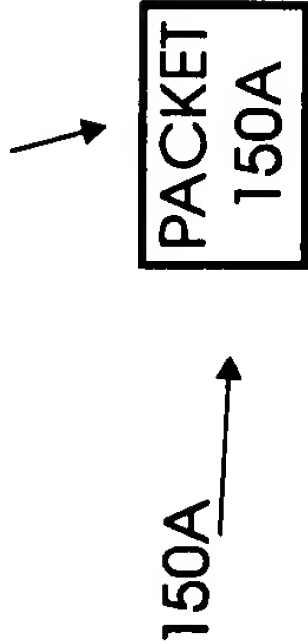
IP HEADER			UDP HEADER		RTP MESSAGE		
SOURCE IP ADDRESS	DESTINATION IP ADDRESS	IP OPTIONS	SOURCE PORT	DEST. PORT	SEQUENCE NUMBER	TIME STAMP	DATA
REPAIR SERVER 120A	REPAIRED MULTICAST SESSION ADDRESS		DELAY BUFFER 140A	RCVR 124	285	090235	

PACKET 285

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

FIG. 2H

UNICAST REQUEST 150A
TO FIRST RETRANSMIT SERVER 110A FOR MISSING PACKETS

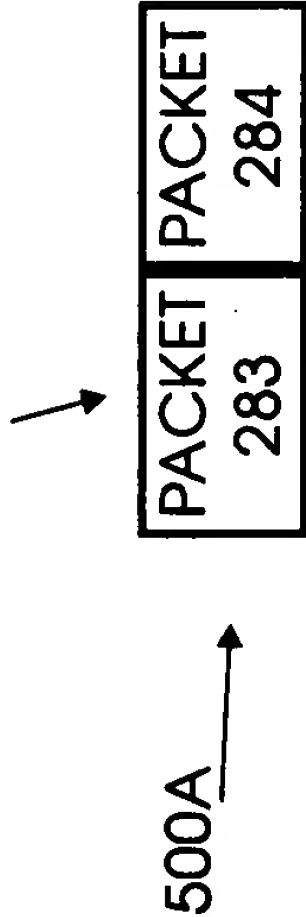


IP HEADER				UDP SEGMENT		REQUEST SEGMENT	
ooo	SOURCE IP ADDRESS	DESTINATION IP ADDRESS	IP OPTIONS	SOURCE PORT	DEST. PORT	DATA	MISSING SEQUENCE NUMBERS 283 - 288
	REPAIR SERVER 120A	RETRANS. SERVER 110A		MSG. PROC. 142A	CIRC. BUFFER 130A		
					ooo		

PACKET 150A

FIG. 21

UNICAST RESPONSE 160A
OF FIRST PORTION OF MISSING PACKETS ON HAND
AT RETRANSMIT SERVER 110A



IP HEADER				UDP SEGMENT			RESPONSE SEGMENT
000	SOURCE IP ADDRESS	DESTINATION IP ADDRESS	IP OPTIONS	SOURCE PORT	DEST. PORT	SEQUENCE NUMBER	DATA
	RETRANS. SERVER 110A	REPAIR SERVER 120A		CIRC. BUFFER 130A	DELAY BUFFER 140A	283	

PACKET 283

FIG. 3A

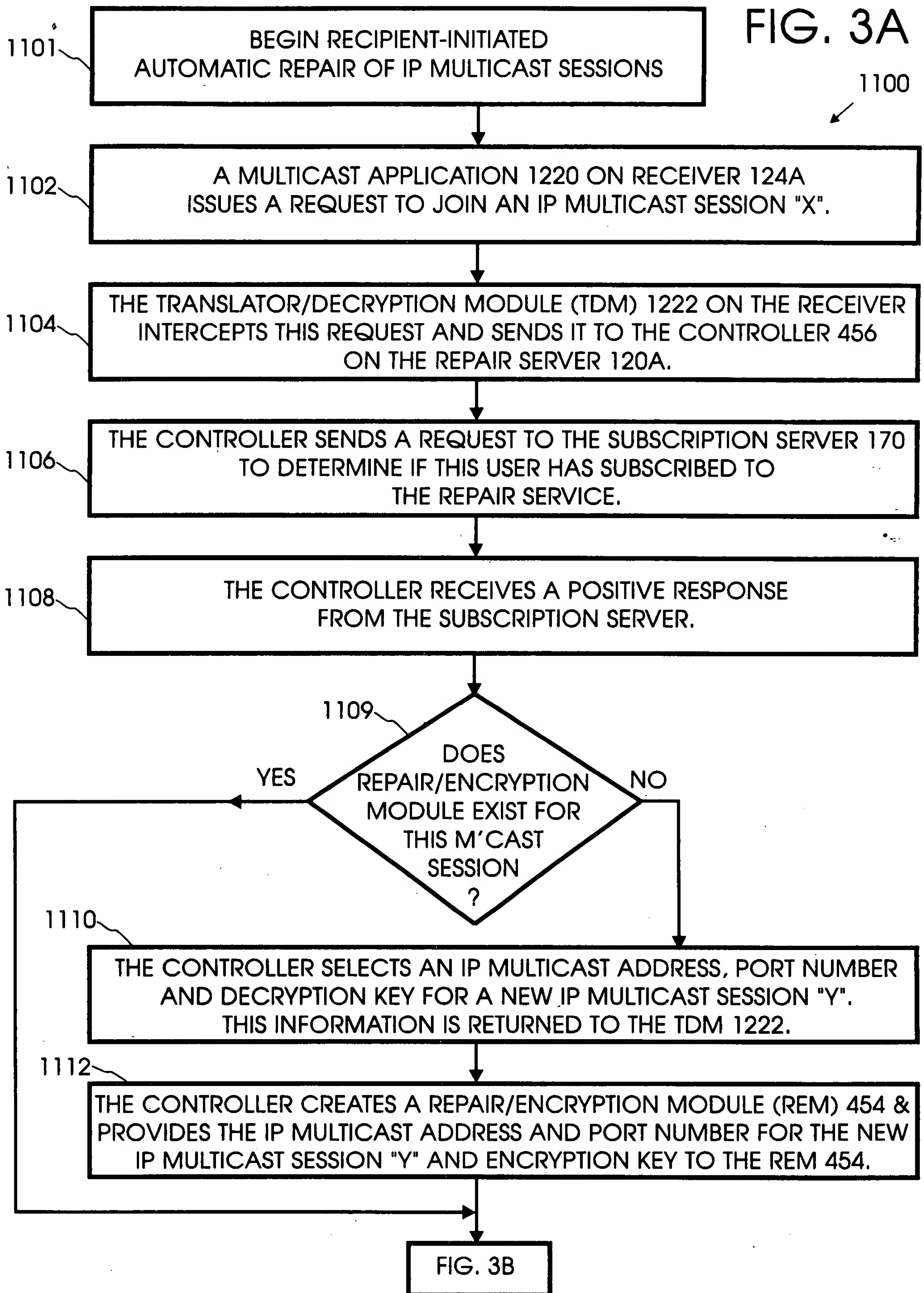


FIG. 3B

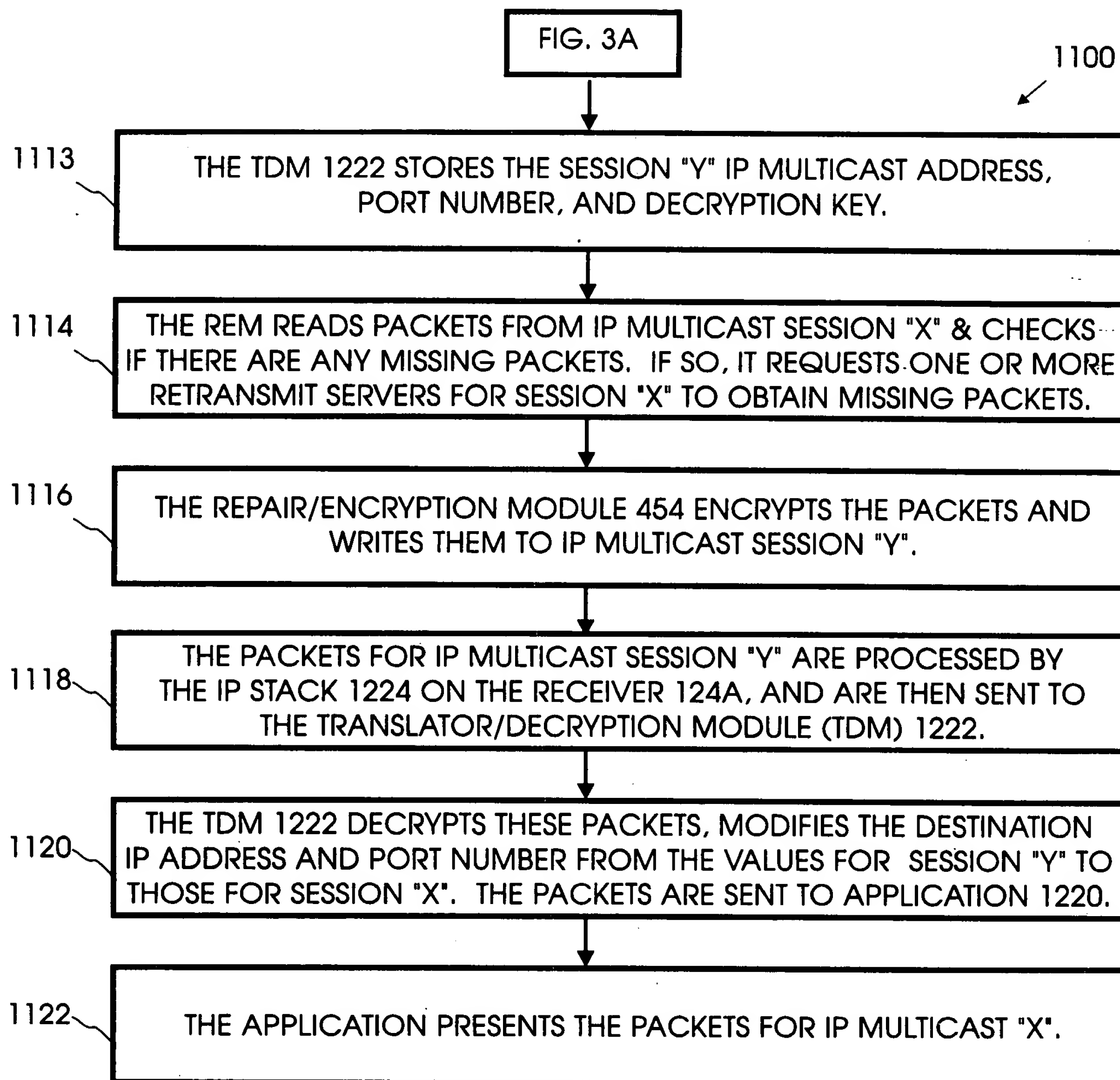
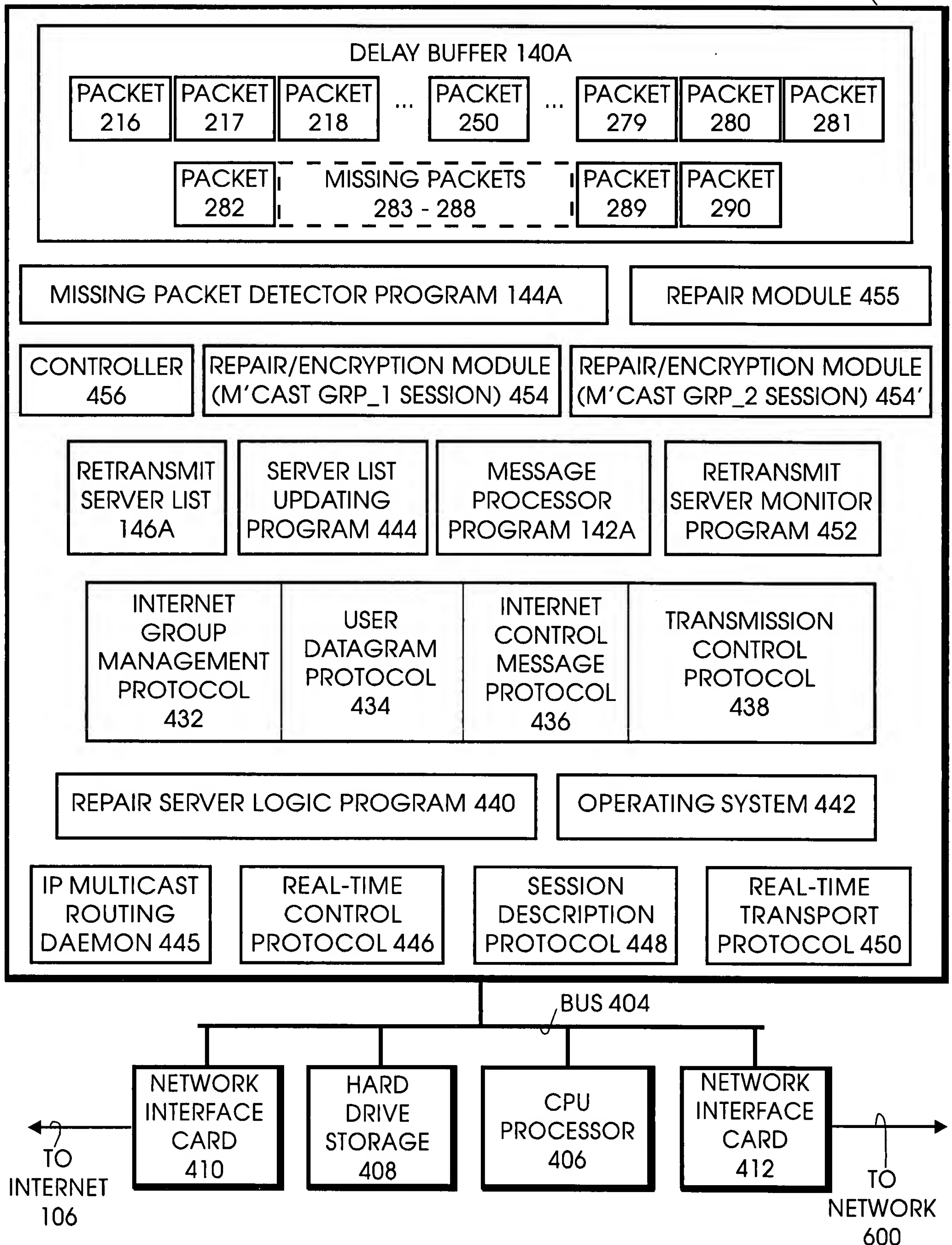


FIG. 4B

REPAIR SERVER

120A

MEMORY 402



05344-0100